UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,995	07/02/2007	Fred Van Essen	031707/315410	8930
826 ALSTON & BI	7590 01/23/200 RD LLP	EXAMINER		
	ERICA PLAZA	YUSUF, MOHAMMAD I		
	RYON STREET, SUIT NC 28280-4000	E 4000	ART UNIT	PAPER NUMBER
			MAIL DATE	DELIVERY MODE
			01/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Comments	10/597,995	VAN ESSEN, FRED			
Office Action Summary	Examiner	Art Unit			
	MOHAMMAD YUSUF	4177			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on					
• • • • • • • • • • • • • • • • • • • •	-· action is non-final.				
<i>,</i> —	, <del></del>				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
ologod in accordance with the practice and in	x parte gaayle, 1000 G.B. 11, 10	0.0.210.			
Disposition of Claims					
<ul> <li>4) Claim(s) 1-7 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) 1-7 is/are rejected.</li> <li>7) Claim(s) is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers					
9) ☐ The specification is objected to by the Examiner.  10) ☑ The drawing(s) filed on 15 August 2006 is/are: a) ☐ accepted or b) ☑ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)    Notice of References Cited (PTO-892)					

Application/Control Number: 10/597,995 Page 2

Art Unit: 4177

#### **DETAILED ACTION**

### **Drawings**

1. Figures 1-4 should be designated by a legend such as --Prior Art--because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

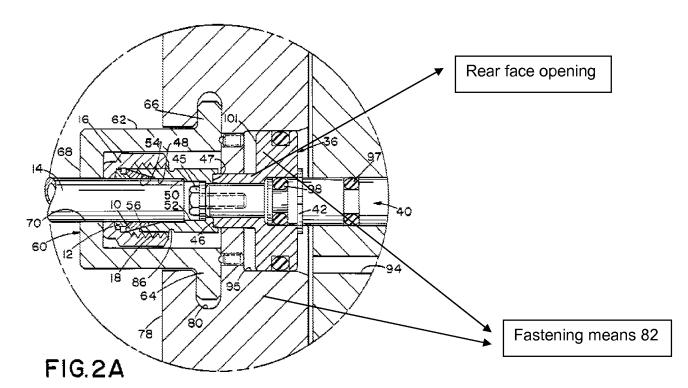
A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Johnston (US 4,873,755).

As to **claim 1**, Johnston teaches:

A head assembly (Fig. 2A) for a swage press (see title, "Swaging tool ...") including a housing (Fig. 2A, retaining cap 60) having a peripheral side wall (annular body portion 62), a front wall (second end 68) integrally formed with said peripheral side wall with an opening (aperture 70) in said front wall providing access to a press zone (press zone includes 16, 56, 45 etc in side the peripheral side wall or annular body portion 62) arranged within said peripheral side wall, said housing having an open rear face (shown on the attached Fig. 2A below);

a rear wall (78) secured by fastening means (fastening means 82) to said peripheral side wall (62) to at least partially close said rear face of the housing, and a hydraulically operated (Fig. 2, hydraulic pump 90; also see column 6, lines 40-45) press mechanism (anvil 44) located within said housing (retaining cap 60) at least partially surrounding said press zone.



Application/Control Number: 10/597,995 Page 4

Art Unit: 4177

As to **claim 2**, Johnston teaches:

Johnston does not teach:

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston (US 4,873,755), in view of applicant's admitted prior art.

A head assembly (Fig. 2A) for a swage press (see title, "Swaging tool ...") including:

i) <u>a housing</u> (retaining cap 60) <u>having a peripheral side wall</u> (annular body portion 62), <u>a front wall</u> (second end 68) <u>integrally formed with said peripheral side wall with an opening</u> (aperture 70) <u>providing access to a press zone</u> (press zone includes 16, 56, 45 etc in side the peripheral side wall or annular body portion 62) <u>arranged within said peripheral side wall, said housing having an open rear face</u> (shown on the attached Fig. 2A below);

ii) a plurality of shoe elements having press surfaces facing radially toward said press zone with said shoe elements being restrained by said front wall to move in a radial direction toward and away from said press zone;

However, applicant's admitted prior art as illustrated in Figs. 1-4 discloses (applicant's admitted prior art on page 4 of the spec, lines 25-28): "Around the press zone 17, a plurality of shoe elements 18 are provided, each having a press face 19 facing inwardly towards the press zone 17 with the shoe elements 18 being arranged in an annular cluster whereby each element is capable of moving inwardly and outwardly in a radial direction."

It would have been obvious for one having ordinary skill in the art at the time the invention was made to replace Johnston's cam type pressing mechanism with a cone/shoe type pressing mechanism as suggested by applicant's admitted prior art, because the applicant's admitted prior art discloses that "[b]y far the most popular and the most economical to manufacture swage press has been the "cone/shoe" type arrangement."(Applicant's admitted prior art on page 1 of the spec, lines 19-24).

- iii) an operating piston means cooperable with each said shoe element (applicant's admitted prior art on page 5 of the spec, line 1, "An operating piston member 22 is provided cooperating with the shoe elements 18.") whereby movement of said operating piston means toward said front wall causes radial movement of the press surfaces of said shoe elements inwardly toward said press zone (applicant's admitted prior art on page 5 of the spec, lines 4-5, "when the piston member 22 moves towards the front wall flange 14, the shoe elements are moved radially inwardly"); and
- iv) <u>a rear wall</u> (Johnston, Fig. 2A, 78) <u>secured by fastening means</u> (Johnston, Fig. 2A, fastening means 82) <u>to said peripheral side wall</u> (Johnston,

Application/Control Number: 10/597,995

Art Unit: 4177

Fig. 2A, 62) to at least partially close said rear face of the housing, said rear wall (Johnston, Fig. 2A, 78) cooperating with said operating piston means (applicant's admitted prior art, Figs 1-4, piston 22) to define at least one chamber (Johnston, Fig. 2A, piston chamber 95) for receiving high pressure hydraulic fluid to effect movement of said operating piston means toward said front wall (Johnston, column 12, lines 11-14, "a fluid pump which is connected to said body, said body including a fluid passage in said body communicating said fluid pump with a piston chamber located in said body.").

As to **claim 3**, modified Johnston teaches:

A head assembly according to claim 2 wherein the operating piston means includes a truncated conical surface facing inwardly and cooperating with outwardly facing inclined surfaces on each of said shoe elements to effect radial movement of said shoe elements upon axial movement of the operating piston means towards said front wall (applicant's admitted prior art on page 5 of the spec, lines 1-6, "[t]he piston member 22 is annularly formed with an inwardly facing truncated cone surface 23 acting as a cam engageable with the inclined ramp surfaces 21 of the shoe elements 18 such that when the piston member 22 moves towards the front wall flange 14, the shoe elements are moved radially inwardly by interengagement of the truncated cone camming surface 23 with the inclined ramp surfaces 21 of the shoe elements 18.").

As to **claim 4**, modified Johnston teaches:

A head assembly according to claim 2 wherein one said chamber is provided for receiving high pressure hydraulic fluid, said chamber being annularly formed with

Application/Control Number: 10/597,995

Art Unit: 4177

opposed annular faces of the chamber being formed respectively by a surface in said operating piston means and an inwardly facing surface of said rear wall (applicant's admitted prior art on page 5 of the spec, lines 7-11, "[m]ovement of the operating piston member 22 towards the front wall flange 14 is achieved by introducing high pressure hydraulic fluid via a connection not illustrated, into an annular cavity defined in part between an inwardly and forwardly facing annular wall surface 24 of the rear housing wall 13 and a rearwardly facing annular wall surface 25 on the piston member 22.").

6. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in paragraph 5 as applied to claim 2, and further in view of Yuda (US 5,440,971).

As to **claim 5**, modified Johnston does not teach:

A head assembly according to claim 2 wherein the rear wall has an outwardly facing cylindrical surface engaged, when assembled, with an inwardly facing cylindrical surface on the housing peripheral side wall at or adjacent the open rear face, said outwardly facing cylindrical wall having at least one groove formed therein and cooperating with at least one groove formed in the inwardly facing cylindrical wall to provide at least one passage extending at least partially circumferentially between the rear wall and the peripheral side wall, and said fastening means being formed by at least one wire positioned in the or each said passage.

Johnston uses, (Fig. 2A, see attached figure above in paragraph 3), a sideway fastening means 82 instead of groove and wire mechanism as claimed However,

Yuda teaches (Fig. 2) of a cylindrical end cap 14, with an outward groove, which is fastened to cylinder 10, with an inward groove, by wire or metallic ring 15. The wire or metallic ring 15 fits between the outward and inward grooves. It would have been obvious for one having ordinary skill in the art at the time the invention was made to replace sideway fastening means of Johnston with a wire or metallic ring means in the way disclosed by Yuda, because this is an art recognized effective alternative way of fastening two separate cylinder walls. A preference on whether to use sideway fastening means as suggested by Johnston or groove and wire or metallic ring mechanism as taught by Yuda is taken to be well within the purview of choice in the art. None, but only the expected/predictable result of providing a sealed chamber for fluid is achieved in using either configuration.

As to **claim 6**, Yuda does **not** teach:

A head assembly according to claim 5 wherein two said passages are provided each extending substantially completely around the circumference of the outwardly facing cylindrical surface of the rear wall, a respective wire being inserted into each of said passages in opposite directions.

Yuda only teaches of one passage which has one groove and one wire ring for sealing. However, it would have been obvious for one having ordinary skill in the art at the time the invention was made to add another passage in order to provide a more secured, stronger and a backup sealing.

As to **claim 7**, Yuda teaches:

A head assembly according to claim 5 wherein an extension of the or each said passage extends tangentially therefrom outwardly through the peripheral side wall to be accessed externally of said side wall (Yuda, Fig. 2, where the passage containing the groove and the metallic ring 15, extends tangentially outward of the end cap 14).

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD YUSUF whose telephone number is (571)270-7487. The examiner can normally be reached on Monday-Friday 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam Yao can be reached on 571-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/597,995 Page 10

Art Unit: 4177

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MY/

/Sam Chuan C. Yao/ Supervisory Patent Examiner, Art Unit 4111